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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO			
09/846,512	05/01/2001	Rachel Meyers	MP100-185P1R2M	5523			
75	590 04/01/2005		EXAM	INER			
	UAL PROPERTY GROU	YU, MISOOK					
MILLENNIUM 40 LANDSDO	I PHARMACEUTICALS II WNE STREET	ART UNIT	PAPER NUMBER				
CAMBRIDGE,	MA 02139		1642				
			DATE MAILED: 04/01/2005	5			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Commence	09/846,512	MEYERS ET AL.
Office Action Summary	Examiner	Art Unit
	MISOOK YU, Ph.D.	1642
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 11 Ja	nuary 2005.	
2a) This action is FINAL . 2b) ☐ This	action is non-final.	
3) Since this application is in condition for allowan	ce except for formal matters, pro	secution as to the merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.
Disposition of Claims		
4) Claim(s) 83-104 is/are pending in the application	n.	
4a) Of the above claim(s) is/are withdraw	n from consideration.	
5)⊠ Claim(s) <u>94 and 96-104</u> is/are allowed.		
6)⊠ Claim(s) <u>83-93 and 95</u> is/are rejected.	•	
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examiner		
10)☐ The drawing(s) filed on is/are: a)☐ acce	•	
Applicant may not request that any objection to the o		1.1
Replacement drawing sheet(s) including the correction		
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:		-(d) or (f).
1. Certified copies of the priority documents		
2. Certified copies of the priority documents	• •	
 Copies of the certified copies of the priori application from the International Bureau 		d in this National Stage
* See the attached detailed Office action for a list of	• • • • • • • • • • • • • • • • • • • •	d
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Attachment(s)		Vi)
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 07/29/02.	6) Other: EXA, br	atent Application (PTO-152) t A (Sequence Alignment)

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/11/2005 has been entered. Since all the previously rejected claims are cancelled, the rejection set forth in the prior Office action is moot.

Claim 83-104 are pending and examined on merits.

The text of those sections of Title 35, U.S. Code not included in this action can be found.

Claim Rejections - 35 USC § 112

Claims 83-93, and 95 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This new matter rejection is made because of the new limitation "a polypeptide which is at least 95 % identical" to SEQ ID NO:2 or "a polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the nucleotide sequence of SEQ ID NO:1 or 3", wherein the claimed polypeptide has

protease activity in base claim 83. The specification as originally filed does not reasonably communicate that the claimed invention is a method using a polypeptide which is at least 95 % identical to SEQ ID NO:2 or a polypeptide encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the nucleotide sequence of SEQ ID NO:1 or 3, wherein the claimed polypeptide has protease activity. This new matter rejection is also made for claim 95, drawn to "a membrane-bound form of an isolated polypeptide".

Applicant states that support for the new claims are found in the previously presented claims, and pages 49-92 of the specification. However, the Office could not find support in the specification originally filed. Applicant is kindly requested to point out the support for the rejected limitation in the specification as originally filed since the support is not apparent to the Office.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 83-87, 89-91, and 93 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. 6,294,663 (the '663 patent, issue, filed 02 March 2000).

Claims 83-87, 89-91, and 93 have two part active steps, i.e. contacting SEQ ID NO: 2 protein with a compound (as listed in claims 87, and 89) and determine whether

the compound interacts with the protein, wherein the interaction is determined by the various art-known method listed in claim 93.

The '663 patent discloses a protein sequence (i.e. SEQ ID NO: 2) that is at least 95 % identical to instant SEQ ID NO: 2 (note Exhibit A, the attached sequence alignment). The instant claims read on the immunohistochemstry assay of the prior art at Fig. 7.

Allowable Subject Matter

Claims 94, and 96-104 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 571-272-0839. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

Any inquiry of a general nature, matching or filed papers or relating to the status of this application or proceeding should be directed to the Judy Ladringan_for Art Unit 1642 whose telephone number is 571-272-0536.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number: 09/846,512

Art Unit: 1642

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MISOOK YU, Ph.D. Examiner
Art Unit 1642

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SUMMARIES

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US-09-619-151 Sequence 2, 3154 35.8 492 4 US-09-619-151 Sequence 2, 3154 3 US-09-619-151 Sequence 2, 3155 3 US-09-619-151 Sequence 2, 3155 3 US-09-151-151 Sequence 2, 3155 3 US-09-151-151 Sequence 3, 3155 3 US-09-614-600-3 Sequence 3, 3155 3 US-09-614-6

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Sequence 257, Ap	Sequence 257, Ap	Sequence 257, App	ģ	Sequence 2, Appl	Sequence 4, Appli	Sequence 17, App	Sequence 13, App	•	Sequence 10, Appl	•	1 Lu	Sequence 3, Appl	Sequence 63, App	2		, N	Sequence 2, Appli

ALIGNMENTS

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300 RIGHDIALMKLAGPLTENEMIQPYCLPNSEENFDDGKYCWTSGWGATEDGGDASPYLAHA 359	240 HLCGGSVITPLMIITAAHCVYDLYLPKSWTIQVGLVSLLDNPAPSHLVSKIVHSKYKYK 299	181 XVIALHHSVYVREGCASGHVVTLQCTACCHRRGYSSRIVGGNMSLLSQMPWQASLQPQGY 240		60 ILALAIGLGIHEDCSGKYRCRSSEKCIELIARCDGVSDCKDGEDBYRCVRVGGQNAVLQV 119 	1 MGENDPPAVEAPPSFRSLEGLDDLKISPVAPDADAVAAQILSLLPLKEF-PIIVIGIIAL 59 	Query Match 97.6%; Score 2385.5; DB 3; Length 454; Best Local Similarity 97.8%; Pred. No. 1.3e-223; Matches 444; Conservative 2; Mismatches 7; Indels 1; Gaps 1;	LENOTH: 454 TYPE: PRI ORGANISM: Homo sapiens FEATURE: FEATURE: FORTHER INFORMATION: complete amino acid sequence of TADG-12 OTHER INFORMATION: protein US-09-518-046-2	CURRENT FILING DATE: 2000-03-02 EARLIER APPLICATION NUMBER: 09/261,416 EARLIER FILING DATE: 1999-03-03 NUMBER OF SEQ ID NOS: 153 SEQ ID NO 2	APPLICANT: O'Brien, Timothy J. APPLICANT: Underwood, Lowell J. TITLE OF INVENTION: Transmembrane Serine Protease Overexpressed TITLE OF INVENTION: in Ovarian Carcinoma and Uses Thereof FILE REFERENCE: D6192CIP TIDER REFERENCE: D6192CIP	RESULT 1 US-09-518-046-2 ; Sequence 2, Application US/09518046 Filent No. 6294663 . GENERAL THEOREMATION.

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RESULT 3
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; OTHER INFORMATION: Amino acid sequence of TADG-12 encoded by nucleotides
; OTHER INFORMATION: 144 to 1511 of Sequence 1
; Patent No. 6291663
US-09-261-416-2
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Best Local Sim
Matches 421;
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GENERAL INFORMATI
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CURRENT APPLICATION NUMBER: US/09/261,416A
CURRENT FILING DATE: 1999-03-03
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APPLICANT: Underwood, Lowell J.
TITLE OP INVENTION: TADG-12: A No. 6291663el Transmembrane Serine Protease
TITLE OP INVENTION: Overexpressed in Ovarian Carcinoma
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ORGANISM: Homo sapiens
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                                                                             VGATSFGIGCAEVNKPGVYTRVTSFLDWIHEQMERDLKT 453
                                                                                                                     AVPLISNKDLOPQ----GRVRWHHLPLHALRGLPDGWRWNSCQGDSGGPLVCQERRLWKL
                                                                                                                                    AVPLISNKICNHRDVYGGIISPSMLCAGYLTGGVD----SCOGDSGGBLVCQERRLWKL
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                                                                                                                                                                                                                                     HLCGGSVITPLWIITAAHCVYDLYLPKSWTIQVGLVSLLDNPAPSHLVBKIVYHSKYKPK
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Pred. No. 3.7e-206;
5; Mismatches 23;
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FILE REFERENCE: D6192CIP
CURRENT APPLICATION NUMBER: US/09/518,046
CURRENT FILING DATE: 2000-03-02
EARLIER APPLICATION NUMBER: 09/261,416
EARLIER FILING DATE: 1999-03-03
NUMBER OF SEQ ID NOS: 153
SEQ ID NO 4
LENGTH: 294
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; FEATURE:
; OTHER INFORMATION: complete amino acid sequence
; OTHER INFORMATION: variant protein
US-09-518-046-4
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                                                                                 ; TYPE: PRT
; ORGANISM: Homo
US-09-342-749-2
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EARLIER APPLICATION NUMBER: US 60/091,044
EARLIER FILING DATE: 1998-06-29
RUMBER OF SEQ ID NOS: 33
SOFTWARE: PACENTIN Ver. 2.0
SEQ ID NO 2
LENGTH: 492
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Query Match 36.3
Best Local Similarity 46.0
Matches 189, Conservative
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                                                                                                                                                                                                                                                                                                       APPLICANT: Teng, DAvid H.-F.
APPLICANT: Myriad Genetics, Inc.
TITLE OF INVENTION: TMPRSS2 is a Tumor Suppressor
FILE REFERENCE: 2318-202
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APPLICANT: Underwood, Lowell J.
TITLE OF INVENTION: Transmembrane Serine Protease Overexpressed
TITLE OF INVENTION: in Ovarian Carcinoma and Uses Thereof
                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/342,749
CURRENT FILING DATE: 1999-06-29
                                                                                                                                                                                                                                                                                                                                                              PPLICANT: Wong, Alexander K.C. PPLICANT: Tavtigian, Sean V. PPLICANT: Teng, DAvid H.-F.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240 HLCGGSVITPLWITTAAHCVYDLYLPKSWTIQVGLVSL------LDNPAPSH 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 PTAASWKTMCSDDWKGHYANVACAQLGFPSYVSSDNLRVSSLEGQFRBEFVSIDHLLPDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ILALAIGLGIHFDCSGKYRCRSSFKCIELIARCDGVSDCKDGEDEYRCVRVGGQNAVLQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGENDPPAVEAPFSFRSLFGLDDLKISFVAPDADAVAAQILSLLPLKFF-PIIVIGIIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KYTALHHSVYVREGCASGHVVTLQCTACGHRRGYSSRIVGGNMSLLSQWPWQASLQFQGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KVTALHHSVYVREGCASGHVVTLQCTACGHRRGYSSRIVGGNMSLLSQWPWQASLQFQGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FTAASWKTMCSDDWKGHYANVACAQLGFPSYVSSDNLRVSSLEGQFREEFVSIDHLLPDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ILALAIGLGIHFDCSGKYRCRSSFKCIELITRCDGVSDCKDGEDEYRCVRVGGQNAVLQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MGENDPPAVEAPPSFRSLPGLDDLKISPVAPDADAVAAQILSLLPPEVFSQSSSLGIIAL
                                                                                                 sapiens
  36.2%; Score 885; DB 3; Length 492;
46.0%; Pred. No. 1.4e-77;
live 53; Mismatches 149; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1354,
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66-123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of TADG-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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20;

Gaps

10;